

**REMARKS**

Claims 1-28 are currently pending in the present Application.

1. **The Claim Objections Have Been Addressed.** The Applicants have amended the claims to address each of the claim objections. The antecedent basis issue in claims 7-10 is addressed by referring to “a transitional area.” The antecedent basis issue in claims 16-21 has been addressed by deleting the word “the” to make clear that “bearings of the bridge” is the first recitation of the end bearings in each claim. Finally, claim 23 has been amended to correct the clerical error in the spelling of the word “comprise.” Withdrawal of the pending claim objections is respectfully requested.

2. **The Claims Are Patentable Over Högl Under § 102(b).**

The Applicants respectfully traverse the rejection of claims 1-3, 7-23 and 26-28 as anticipated under 35 U.S.C. § 102(b) by Swiss patent document CH 666 500 A5 (“Högl”), on the grounds that this reference does not disclose all the features of the present invention for which it is cited.

First, the Högl reference is cited as disclosing the present invention’s track girders, constructed as truss girders with a triangular cross section and a chord profile at each triangulation point. September 2, 2004 Office Action at 2. Review of Högl Figs. 1, 2, however, reveals that there is no chord profile at an upper triangulation point (*i.e.*, a point where the truss planes meet). Rather, while Högl’s upper chord 7 is at the upper end of the outer wall struts 5, *the inner wall struts 6 does not reach up to upper chord 7*. Instead, the bottom-hinged inner struts 6 are bolted to plates hanging below the strut 5/chord 7 junction. *See, e.g.*,

Högl Figs. 1, 2 (plate at top center of Fig. 2; fasteners denoted by “+” symbols).

Thus, Högl does not disclose or suggest the present invention’s “two track girders which are constructed as truss girders with a triangular cross-section, *wherein a chord profile is provided at each triangulation point.*”

Claim 1 recites that the present invention bridge’s upper and lower truss nodes are formed at the intersections of the diagonal struts and the upper and lower chords (*i.e.*, “wherein lower and upper truss nodes respectively are formed at the points of the connection of two diagonal struts and a lower chord and an upper chord respectively”). Högl Figs. 1 and 2 show that the Högl bridge does not have such truss nodes. In addition to the tops of inner struts 6 being located away from the upper chord, at the lower side of the Högl bridge, *neither* outer diagonal struts 5 or inner diagonal struts 6 have their lower connection points at the lower chord of the Högl bridge (Högl lower chord shown in Fig.1 at bottom level containing labels 4, 10).

Högl also fails to disclose or suggest the present invention’s transverse girder arrangements. As recited in claim 1, “the two track girders are force-lockingly connected by transverse girders,” and the transverse girders “are fitted completely through the track girders and are force-lockingly connected with the latter, so that the transverse girders fix the distance between the two truss planes on the bottom side of a track girder as well as the two track girders with respect to one another, wherein the transverse girders rest on the lower nodes of the two truss planes of a track girder and are force-lockingly connected with the latter.” Further, the present invention’s transverse girders are “are force-

lockingly connected with" the bridge's roadway planks. In this way, each of the different elements can be tailored (with respect to cross section, materials used, etc.) according to the specific loads they have to bear, thereby permitting the bridge design to be optimized in terms of weight, cost, etc.

In contrast, Högl uses a integrated track layer that extends, beneath the truss struts, across the whole width of the bridge. *See, e.g.*, Högl Fig. 1. Because Högl's integrated track layer 3 ("Fahrbahnplatte") has to serve *all* the functions performed by the individual elements of the present invention, the Högl structure must be overbuilt, *i.e.*, if designed to withstand a load on one part of the structure, the structure is over built in other portions. The Högl integrated track layer 3 therefore cannot be optimized for specific applications in the same manner as can the present invention's individual elements (transverse girders, roadway planks, etc.).

The present invention bridge's transverse girders also are fitted completely through the track girders so that the transverse girders fix the distance between the two truss planes on the bottom side of each track girder, as well as the two track girders with respect to one another ("the transverse girders rest on the lower nodes of the two truss planes of a track girder and are force-lockingly connected with the latter"). According to Högl's bridge, there are no separate transverse girders at all. Instead, the two lower chord profiles (4 and 10 of Fig. 1) run in hollow spaces inside the integrated track layer 3. Thus, unlike the present invention, the Högl transverse girders do not rest on (or are otherwise affixed to) the lower nodes of the two truss planes of a track girder. In

Högl's bridge nothing rests on the nodes of the truss planes. The integrated track layer 3 is arranged below and distant to the nodes.

The Högl bridge also fails to disclose or suggest the present invention's approach to girder transport and deployment, wherein "the two truss planes of a track girder are connected *at the upper triangulation point* of the track girder cross-section *by means of a hinge*, so that, when the bridge is taken down, the track girders can be folded together." Thus, two truss planes of the inventive bridge's track girder are hinged at the upper triangulation point of the track girder cross section in order to permit the bottoms of the track girders to be folded together. Hence, the transition from the folded-open form to the folded-together form can take place quite rapidly and without tools (*e.g.*, no struts or girders must be joined or separated from one another, and no fasteners need be made up or separately maintained). According to Högl's bridge, there are hinges 34, 35 at the *lower* end of each wall 5, 6, which allow the walls to fold inwardly (*see, e.g.*, Fig. 8). But this is only possible if walls are separable at their top, not hinged as in the present invention. Moreover, because the Högl truss walls are hinged at the bottom and fold inwardly, their height is limited by the width of the integrated track layer 3. By being hinged at the top and having separate transverse members as recited in the pending claims, the present invention's truss height is not so limited.

In view of the foregoing, the Applicants respectfully submit that the Högl's bridge fails to disclose or suggest several of the features of the present invention recited in the pending claims which provide an extremely light bridge that can be

assembled and dismantled very rapidly, and which does not require the Högl bridge's additional support frame for bridge construction (Högl elements 21, 24; Figs. 3, 5-7). The present invention therefore is patentable over Högl under § 102(b). Reconsideration and withdrawal of the pending rejections of claims 1-3, 7-23 and 26-28 is respectfully requested.

**3. The Remaining Claims Are Patentable Under § 103(a).**

The Applicants respectfully traverse the rejection of claims 4-5 and 24-25 as unpatentable under 35 U.S.C. § 103(a) over Högl in view of U.S. Patent Publication No. 2001/0002497 ("Scuero") on the grounds that these references, either alone or in combination, fail to teach or suggest the present invention.

Scuero is cited as disclosing a geocomposite for roads and bridges made of fibers. This reference teaches nothing, however, with respect to the arrangements of the bridge of the present invention, and thus does not cure the foregoing deficiencies of Högl. The combination of these references therefore fails to teach or suggest the invention recited in claims 4-5 and 24-25. These claims are therefore patentable over Högl and Scuero under § 103(a).

Reconsideration and withdrawal of the pending § 103(a) rejection is respectfully requested.

**CONCLUSION**

The Applicants respectfully submit that claims 1-28 are in condition for allowance. Early and favorable consideration, and issuance of a Notice of Allowance for these claims is respectfully requested.

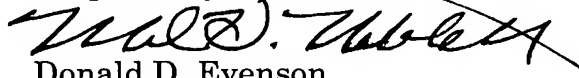
If there are any questions regarding this amendment or the application in

general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #080404.52663US).

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